



## CITY OF SUGAR LAND

Engineering Department

**CIP Project Number:** ST0801

**Title:** Dulles Avenue Upgrade

**Project Phase:** Design

**% of Phase Completion**



**Cost for this Phase:** \$1,500,000

**Funding Sources:** Certificate of Obligation

**Project Manager:** Keisha E. Seals

**Contractor:** TBD

**Consultant:** Freese and Nichols, Inc.

**Project Description:** Design and construct Dulles Avenue between US90A and SH6.

Dulles will be widened to a four-lane concrete pavement with raised median and turn lanes between US90A and Avenue E. Turn lanes will be added at various intersections south of Avenue E, where Dulles is already a four-lane concrete boulevard with a raised median. The preliminary engineering report was completed in spring 2008.

**Justification:** The project will improve safety and mobility along Dulles Avenue per the 2001 study completed by Sugar Land, Missouri City, and Stafford. Outside funding is available as follows: \$2.79M - FBC 2007 mobility bonds; \$1.5M - FBC 2000 mobility bonds; and the cities of Stafford and Missouri City (funding contribution not yet determined).

**Updates:** **December 2008** - The Engineering Department selected Freese and Nichols, Inc. (FNI) as the consultant for the PS&E. A notice to proceed and kickoff meeting was conducted during the week of December 8, 2008. The project is under way with the

surveying crew picking up all topographical data and conducting right-of-entry (ROE) on the private properties. The project schedule is anticipated for 540 days (approximately 1-1/2 years) with construction anticipated in 2010.

**January 2009** – A meeting was held with the Sugar Creek Townhome Association to discuss their concerns regarding traffic safety and gap time between signals, sight distance at River Creek Way, electrical and irrigation system along the front of the berm area, noise and mitigation. The THA was informed that according to City Policy on constructing sound walls, no sound wall was scheduled to be constructed with this project and that the City Council would have to provide staff with direction if that was to change.

The project team attended a meeting at TxDOT District to discuss the SH 6 improvements and the need to do an environmental report. A follow up meeting was conducted to discuss the TxDOT rules requiring an environmental report to be prepared for any improvements within TxDOT ROW. FNI prepared a change order to prepare the environmental report (which was outside of their scope of services). The change order was for the amount of \$24,840.

**February 2009** – Geotechnical sub conducted bore drillings and lab/office work to prepare a recommendation for the pavement design. Subsurface Utility Engineering (SUE) was completed and survey.

**March 2009** – Surveyor completed mapping for SH 6, Cartwright and Lexington Blvd intersections. Topo mapping was submitted to consultant to begin design of the intersections. Freese and Nichols, Inc. began review of the PER and schematic layouts and began the preliminary design layout for SH 6 improvements. The hydrology and hydraulic (H&H) analysis has begun.

The change order for the environmental report for SH 6 was approved and FNI have begun their work on extrapolating the necessary information from the previous environmental report to focus solely on SH 6 for TxDOT submittal and approval.

A revised schedule was submitted: <R:\Engineering\CIP\PROJECT FILES\Dulles\PSE\Contract\Dulles Ave Schedule 032409.pdf>

**April 2009** - Surveyor continuing work and geotechnical firm began work.

**May 2009** – FNI begun H&H analysis for drainage portion of the project.

**June 2009** – FNI is continuing the H&H analysis. The proposed Mamie Library changes have been completed and a meeting will be held with the Commissioner Myers and Prestige to discuss recommended changes. FNI is continuing working on the plan and profile for Ave E to 90A and the intersection improvements. Coordination has taken place with FNI and Kimley-Horn (consultant for the SH 6 Access Management project) regarding incorporation of Dulles

Ave/SH 6 intersection improvements into KH design for the median extension. A 30% pre-submittal meeting is scheduled for July.

**July 2009-** N/A

**August 2009-** FNI has been continuing the design analysis of the drainage. During the scoping of the project, staff requested FNI to revisit the recommendation of the drainage design in the PER since the design was required by TxDOT. Staff recognized drainage was an issue and wanted to ensure the best solution for the drainage was being recommended. FNI has since come up with several alternatives for staff to review and a final determination would include approval from FBC drainage engineer to discharge additional flow into the Stafford Run system.

**September 2009-** FNI and staff will meet with the FBC drainage engineer to discuss the various constraints of the drainage and move forward with the recommended alternative once approval is provided from FBC. The project is over 30% complete and staff will be conducting a workshop with City Council to provide an update. The next steps will be the completion of the drainage design, ROW mapping and the beginning of the ROW acquisition process. Staff is continuing their efforts in coordinating with WCID #2, Missouri City, Stafford City and FBISD. Further coordination with Sugar Creek HOA, TOA and River bend Country Club will take place once the ROW has been finalized.

**November 2009 –** FNI and staff met with FBCDD, Stafford and LJA (hired by the City of Stafford) to discuss drainage options. FNI submitted a technical memo outlining the agreed upon option and is awaiting comments back from the stakeholders. Staff will be submitting a change order for approval in January to pay for the additional drainage analysis/design. Next steps will include 60% submittal and begin ROW acquisition.

**December 2009 –** Based on the results of the technical drainage memo submitted by FNI, the FBCDD is requiring the City to mitigate the additional drainage impacts to the Stafford Run system via a detention pond. Staff met with Mark Vogler (FBCDD) and the City of Stafford to discuss the process of moving forward with a location to acquire for the detention pond and finalizing the drainage design. Since the most feasible locations are within the City of Stafford, they will take the lead in obtaining the parcel. Once a location has been determined, FNI will provide the change order for approval. FNI has begun the ROW Mapping to provide locations where acquisition/dedication is necessary for the improvements. This task will be shared by Missouri City, City of Stafford, FBC ROW Department and Sugar Land.

**January 2010 –** The consultant continued with the drainage analysis for the proposed mitigation. Based on the analysis the consultant was able to come up with another alternative that would allow the City to mitigate all impacts underground as opposed to a detention pond. Staff informed FBCDD and City of Stafford regarding the findings and FBCDD submitted a

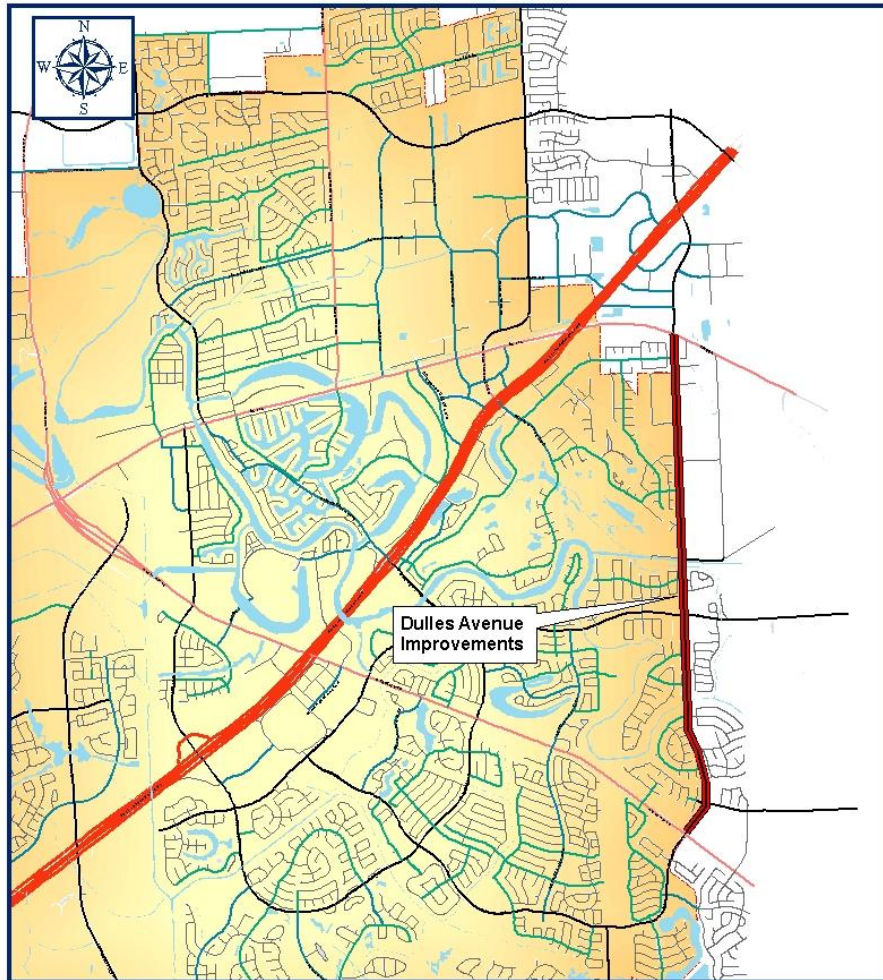
“Letter of No Objection” regarding the design. This allowed staff to solidify the design of the drainage and the ability to provide a recommendation to City Council as well as come back to City Council with a change order for the additional drainage design the consultant conducted.

**February 2010** – Staff provided City Council with an update on all major roadway projects via a workshop. During the workshop staff informed City Council of the final recommended alternative to mitigate underground and received direction to move forward with bringing the change order to Council for approval.

**March 2010** – Staff presented the drainage change order to City Council in the amount of \$125k and was approved via consent. Staff met with all the utility companies within the corridor, providing them an update and making available the utility color coded plans for them to go and do their own assessment of the conflicts. There are several locations where there are utility easements that the project would acquire due to ROW needs. In those areas, the City (or other Stakeholders, ie: FBC or Stafford) will be responsible for reimbursing (paying) for the relocation of the franchises lines. The consultant recommended that the City require the dry utilities to completely remove any lines they want to abandon so there would be room for new lines going back in due to the tight corridor. Staff agreed this was a good recommendation and would move forward with it.

The draft metes and bounds have been completed for the entire project corridor and are in review. Once complete, there will be a ROW mapping meeting and each Stakeholder (ie: FBC, Stafford and Missouri City) will be provided with the necessary metes and bounds in their city limits to obtain for the project. Once the ROW is acquired, the utility companies can begin the relocation/removal of their lines. Staff anticipates that the ROW needs to be acquired by the end of the summer 2010 in order for the utility companies to be out of the way by February 2011 letting.

A 60% utility coordination meeting will be held in May to discuss possible joint trenching with the various dry utility companies. This approach will allow more room for all the companies to share since the corridor is very narrow.



City of Sugar Land  
Capital Improvement Program

**ST0801  
Dulles Avenue  
Improvements**

